

REMARKS

The application has been reviewed in light of the Final Office Action dated December 23, 2009 and the Advisory Action dated March 1, 2010. Claims 1, 3-10, 12-15, 17-30, and 32-36 are pending in this application, with claims 1, 30, and 32 being in independent form. By the present Amendment, claims 1, 6, 7, 13, 30, and 32 have been amended. (Claim 13 is amended to correct a typographical error.) New claims 34, 35, and 36 have been added. Claim 2 is canceled hereby without prejudice or disclaimer. Claims 11, 16, and 31 have been previously canceled. It is submitted that no new matter has been added and no new issues have been raised by the present Amendment.

Applicant's undersigned representative would like to thank Examiner Phongsvirajati for conducting a telephone interview with Francis G. Montgomery and Joseph Gross on March 30, 2010. During this interview, the patentability of independent claims 1, 30, and 32 over the cited art was discussed, and in particular, the merits of combining machine learning of Chen with the medical insurance claim verification system of Pritchard. While no agreement was reached as to exact wording of allowable claim language, Examiner Phongsvirajati appeared to agree that if the limitations of dependent claim 2 were added into the independent claims and the claims were further limited to indicate that the claimed machine learning techniques were used in a probabilistic approach to automatically classifying the medical claims, then the claims may overcome the current rejections. Accordingly, for the purposes of advancing prosecution, the claims have been so amended.

Claims 1-4, 8-10, 12-25, 30, and 32 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over U.S. Patent No. 4,491,725 ("Pritchard") in view of U.S. Patent No. 6,917,926

("Chen"). Claim 33 was rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Pritchard in view of Chen and U.S. Patent No. 5,613,072 ("Hammond"). Claims 5-7 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Pritchard in view of Chen and Applicants allegedly admitted prior art. Claims 26-29 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Pritchard in view of Chen and U.S. Patent Application Publication No. 2003/0149594 ("Beazley").

With respect to independent claim 1, as amended, "the step of automatically classifying the medical claim comprises predicting a probability or score of the medical claim being accepted or rejected by the target payer" (emphasis added). Literal support for this amendment may be found, for example, in paragraph [0014] of the original application, as published. This amendment clarifies that in the claim, machine learning techniques are used as a probabilistic approach to predict probable acceptance or rejection of the medical claim. Predicting a probability or score is distinguishable from the Pritchard approach that deterministically identifies whether a medical claim will be accepted or rejected by using a set of rules that are identical to the rules used by the payer to determine if the medical claim should be paid or denied. The art of claim scrubbing, for example, as shown in Pritchard, is not concerned with guessing or predicting a probable outcome, it is instead concerned with knowing the outcome prior to filing. Thus because the art of claim scrubbing is concerned with determining an outcome rather than predicting an outcome, it would not be obvious to combine the probabilistic approach of machine learning of Chen with the deterministic approach of claim scrubbing of Pritchard.

For at least this reason, independent claim 1 is patentably distinct from the cited art. Dependent claims 2-10, 12-15, 17-29, and 34 are patentably distinct from the cited art at least owing to their dependence upon independent claim 1.

Similarly, in independent claim 30, as amended, “the step of automatically classifying the medical claim comprises predicting a probability or score of the medical claim being accepted or rejected by the target payer.” In light of the arguments presented above, it would not be obvious to combine the probabilistic approach of machine learning of Chen with the deterministic approach of claim scrubbing of Pritchard. For at least this reason, independent claim 30, as amended, is patentably distinct from the cited art. Dependent claim 35 is patentably distinct from the cited art at least owing to its dependence upon independent claim 30.

Similarly, in independent claim 32, as amended, “the step of predicting the disposition of the medical claim comprises predicting a probability or score of the medical claim being accepted or rejected by the target payer.” In light of the arguments presented above, it would not be obvious to combine the probabilistic approach of machine learning of Chen with the deterministic approach of claim scrubbing of Pritchard. For at least this reason, independent claim 32, as amended, is patentably distinct from the cited art. Dependent claims 33 and 36 are patentably distinct from the cited art at least owing to their dependence upon independent claim 32.

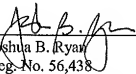
Additionally, new claims 34-36 claim that, “for each of the one or more trained classifiers, a corresponding accuracy score is obtained and when an accuracy score is below a desired threshold, the corresponding trained classifier is removed from the set of one or more trained classifiers used to” “automatically classify the medical claim” or “predict the disposition

of the medical claims.” Literal support for this claimed feature may be found, for example, in paragraph [0062] of the original specification, as published. As this feature is neither taught nor suggested in the cited art, dependent claims 34-36 are additionally patentably distinct from the cited art. Moreover, the claimed accuracy score is clearly a probabilistic determination that adds to the rational discussed above that it would not be obvious to combine the probabilistic approach of machine learning of Chen with the deterministic approach of claim scrubbing of Pritchard.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,

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